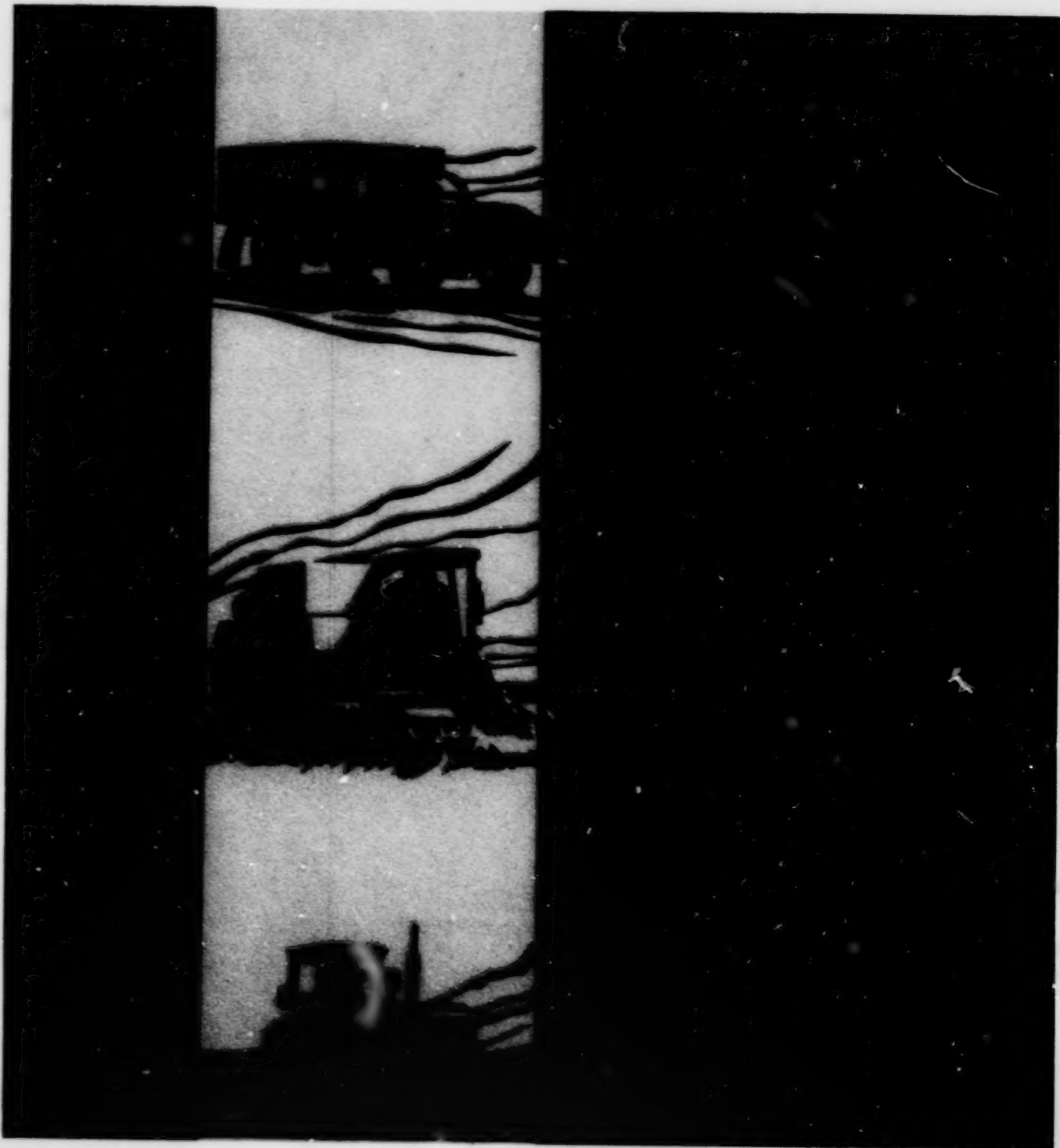




Saskatchewan
Agriculture

Farm Machinery Custom and Rental Rates 1984



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Introduction

This publication gives detailed information on machinery ownership and operating costs, custom rates and rental rates for farm machinery. **This information is provided as a guide only and should be interpreted and adjusted for individual situations.**

The tables are composed of three separate types of information: machinery cost information, rental rate suggestions, and custom rate suggestions.

Machinery Cost Table

The basis for the machine cost data is original cost of the equipment. This information was collected in January 1984, using the most current equipment pricing guides of the major equipment manufacturers and various shortline manufacturers. The manufacturers suggested retail price was discounted 15% to take into account a cash deal.

The machine cost data is given for a wide variety of farm equipment, under three ranges of annual hours of use. The data is specific to each individual machine and details fixed costs (depreciation, investment cost, insurance and housing) and variable costs (repairs, fuel, oil and grease). The total cost per hour figure is the total cost of owning and operating that particular machine. In the case of drawn equipment, a power unit suitable to that drawn machine has been selected and the total cost of both the power unit and the drawn machine have been added together to arrive at an overall total cost for that operation. If the power unit selected in the custom rates doesn't agree with your own power unit, take the appropriate total cost for your power unit and add it to the total cost of the drawn machine. In this manner you are able to select the correct components to arrive at your total cost of operation.

In addition, enough detail is given for you to change the level of operating costs we have calculated in arriving at the total cost per hour.

For example, you may feel the fuel consumption used in the calculation is too low or high for your situation. You can adjust the fuel consumption and calculate the appropriate fuel cost per hour to arrive at the total cost per hour. In all cases diesel fuel is valued at 36.9¢ per litre (1.68/gal) and regular gas is valued at 38.6¢ per litre (1.75/gal). Oil and grease is valued at 35¢ per 100 H.P.

Rental Rates Table

The rental rates section deals specifically with renting equipment on short time periods. The rates are not designed as lease rates, (i.e.) the rates would not be correct for long term or seasonal lease arrangements.

Rental rates are calculated by adding the fixed costs (ownership costs) and repairs to arrive at the basic rental costs. The margin is calculated by multiplying the basic rental costs times 15%. The margin is added to cover risk, profit and management. The rental rates

include an allowance for repairs only. The machine owner is responsible for paying all repair costs (major and minor) for the normal maintenance of the machine. The renter is responsible for fuel and lubrication. No account is made to cover neglect by the renter. In the case of neglect, a settlement between the parties involved must be negotiated.

The suggested rental rate is the addition of the basic rental costs and the margin. The rental rates are specific for each machine and if a complement (tractor and machine) is rented, the addition of the two machine rental rates should be used in establishing the rental rates of the complement.

Custom Rates Table

The custom rates section deals specifically with suggested rates for custom work (machine(s) and operator). The basic custom work costs are calculated by summing the total costs of the power unit machine (if applicable) and the labor allowance per hour. A margin to cover risk, profit, management and an incentive for the operator is calculated by multiplying the basic custom costs times 15%. The custom rate is then determined by adding the basic custom work costs and the margin. In all cases a basic labor rate of \$9.00 per hour is used.

The information provided in all three segments of the table are based on average conditions and should be used as guides only.

Appendix B and C contain the calculation worksheets which can be used along with Appendix D in establishing a rental or custom rate for your particular machine. When estimating your own costs refer to the instructions on the worksheet for the methods used to do the actual calculations.

Additional points to consider when negotiating on a custom work agreement are outlined in Appendix E.

This publication has been compiled by Howard Duncan and Wayne Holt of the farm business management section. The contributions of the many people that assisted with the compiling and reviewing of this material are acknowledged.

Farm Business Management Section
Saskatchewan Agriculture
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Powered Equipment

Powered Equipment				Machine Component Costs Per Hour					Machine Rental Per Hour				Custom Work Rates				Sugg. Custom Rate per Acre	
Machine/Size	Orig. Cost	Ann. Hrs. Use	Fuel Type & Gal. /hr	Fixed Costs (\$/hr)	Repair Costs (\$/hr)	Fuel Costs (\$/hr)	Lube & Oil Costs (\$/hr)	Total Costs Per Hour (No Labor) (\$/hr)	Labour Costs (\$/hr)	Basic Rental Costs (\$/hr)	Margin (\$/hr)	Rental Rate (\$/hr)	Basic Custom Work Costs (\$/hr)	Margin (\$/hr)	Custom Rate (\$/hr)	Work Rate		
TRACTORS																		
2WD (PTO-HP) 30-40 HP	16,800	400	1.7	3.51	.88	2.89	.12	7.40	9.00	3.35	.50	3.85	15.36	2.30	17.66			
		600	(D)	2.47	.88	2.89	.12	6.36										
		800		1.97	.88	2.89	.12	5.30										
40-50 HP	18,900	400	1.9	5.60	1.41	3.23	.16	10.40	9.00	5.35	.80	6.15	17.74	2.66	20.40			
		600	(D)	3.94	1.41	3.23	.16	6.74										
		800		3.14	1.41	3.23	.16	7.94										
50-60 HP	19,000	400	2.3	6.30	1.58	3.91	.19	11.98	9.00	6.01	.90	6.91	19.11	2.87	21.98			
		600	(D)	4.43	1.58	3.91	.19	10.11										
		800		3.53	1.58	3.91	.19	9.21										
60-70 HP	22,300	400	3.0	7.39	1.86	5.10	.23	14.58	9.00	7.05	1.06	8.11	21.38	3.21	24.59			
		600	(D)	5.19	1.86	5.10	.23	12.38										
		800		4.15	1.86	5.10	.23	11.34										
70-80 HP	26,700	400	3.6	8.85	2.22	6.12	.26	17.45	9.00	8.44	1.27	9.71	23.82	3.57	27.39			
		600	(D)	6.22	2.22	6.12	.26	14.82										
		800		4.97	2.22	6.12	.26	13.57										
80-90 HP	29,900	400	3.9	9.91	2.49	6.63	.30	18.33	9.00	9.45	1.42	10.87	25.38	3.81	29.19			
		600	(D)	6.96	2.49	6.63	.30	16.38										
		800		5.56	2.49	6.63	.30	14.99										
90-100 HP	44,300	400	4.5	14.68	3.69	7.65	.33	26.35	9.00	14.01	2.10	16.11	30.99	4.65	35.64			
		600	(D)	10.32	3.69	7.65	.33	21.99										
		800		8.24	3.69	7.65	.33	19.91										
100-120 HP	48,700	400	5.0	16.47	4.14	8.50	.39	29.50	9.00	15.72	2.36	18.08	33.61	5.04	38.65			
		600	(D)	11.58	4.14	8.50	.39	24.61										
		800		9.24	4.14	8.50	.39	22.27										
120-140 HP	55,300	400	6.2	18.29	4.60	10.54	.46	33.89	9.00	17.46	2.62	20.08	37.46	5.62	43.08			
		600	(D)	12.86	4.60	10.54	.46	28.46										
		800		10.27	4.60	10.54	.46	25.87										
140-160 HP	81,800	400	7.1	20.48	5.15	12.07	.53	38.23	9.00	19.54	2.93	22.47	41.14	6.17	47.31			
		600	(D)	14.39	5.15	12.07	.53	32.14										
		800		11.49	5.15	12.07	.53	28.24										
160-180 HP	82,300	400	8.5	20.71	5.21	14.45	.60	40.97	9.00	19.77	2.97	22.74	43.82	6.57	50.39			
		600	(D)	14.56	5.21	14.45	.60	34.82										
		800		11.63	5.21	14.45	.60	31.89										
180 + HP	70,800	400	8.6	23.46	5.90	14.62	.63	44.81	9.00	22.39	3.36	25.75	46.64	7.00	53.64			
		600	(D)	16.49	5.90	14.62	.63	37.84										
		800		13.17	5.90	14.62	.63	34.32										
TRACTORS																		
4WD (D8RHP) 100-150 HP	68,000	300	7.6	30.02	4.60	12.92	.44	47.98	9.00	27.85	4.18	32.03	50.21	7.53	57.74			
		400	(D)	23.25	4.30	12.92	.44	41.21										
		500		19.29	4.60	12.92	.44	37.28										
150-180 HP	87,800	300	9.1	38.19	5.86	15.47	.58	60.10	9.00	35.45	5.32	40.77	60.50	9.08	69.58			
		400	(D)	29.59	5.86	15.47	.58	51.80										
		500		24.54	5.86	15.47	.58	46.48										
180-200 HP	93,800	300	10.1	40.67	6.24	17.17	.67	64.75	9.00	37.75	5.66	43.41	64.59	9.69	74.28			
		400	(D)	31.51	6.24	17.17	.67	55.89										
		500		26.13	6.24	17.17	.67	50.21										
200-230 HP	106,800	300	11.9	46.50	7.13	20.23	.75	74.81	9.00	40.16	6.47	46.63	73.14	10.97	84.11			
		400	(D)	36.03	7.13	20.23	.75	64.14										
		500		29.88	7.13	20.23	.75	57.89										
230-300 HP	124,900	300	14.0	54.33	8.33	23.80	.93	87.39	9.00	50.42	7.56	57.98	84.15	12.62	96.77			
		400	(D)	42.09	8.33	23.80	.93	75.16										
		500		34.91	8.33	23.80	.93	67.87										
300 + HP	137,900	300	18.0	59.99	9.20	30.60	.53	100.69	9.00	55.67	8.35	64.02	95.80	14.37	110.17			
		400	(D)	46.47	9.20	30.60	.53	88.89										
		500		38.54	9.20	30.60	.53	79.87										

Powered Equipment

				Machine Component Costs Per Hour					Machine Rental Per Hour				Custom Work Rates				
Powered Equipment			Fuel Type & Gals./hr	Fixed Costs (\$/hr)	Repair Costs (\$/hr)	Fuel Costs (\$/hr)	Lube & Oil Costs (\$/hr)	Total Costs Per Hour (No Labor) (\$/hr)	Labour Costs (\$/hr)	Basic Rental Costs (\$/hr)	Margin (\$/hr)	Rental Rate (\$/hr)	Basic Custom Work Costs (\$/hr)	Margin (\$/hr)	Custom Rate (\$/hr)	Work Rate	Sugg. Custom Rate per Acre
Machine Size	Orig. Cost	Ann. Hrs. Use															
Trucks Pick-Up																	
1/2-ton (70 kph)	11,000	100	3.0	13.94	3.21	5.31	.35	22.81									
		120	(G)	11.96	3.21	5.31	.35	20.83	9.00	15.17	2.28	17.45	29.83	4.47	34.30		
		140		10.59	3.21	5.31	.35	18.46									
3/4-ton (70 kph)	19,400	100	3.5	16.98	3.91	6.20	.35	27.44									
		120	(G)	14.57	3.91	6.20	.35	25.03	9.00	18.48	2.77	21.25	34.03	5.10	39.13		
		140		12.90	3.91	6.20	.35	23.36									
Trucks Grain																	
1-ton (70 kph)	15,900	100	3.9	19.77	5.85	6.90	.42	32.94									
		120	(G)	16.97	5.85	6.90	.42	30.14	9.00	22.82	3.42	26.24	39.14	5.87	45.01		
		140		15.02	5.85	6.90	.42	28.19									
3-ton (60 kph)	23,500	100	5.0	29.79	8.81	8.85	.42	47.87									
		120	(G)	25.56	8.81	8.85	.42	43.64	9.00	34.37	5.16	39.53	52.64	7.90	60.54		
		140		22.63	8.81	8.85	.42	40.71									
4-ton (80 kph)	26,500	100	5.8	33.59	9.94	10.27	.42	54.22									
		120	(G)	28.82	9.94	10.27	.42	49.45	9.00	38.76	5.81	44.57	58.45	8.77	67.22		
		140		25.51	9.94	10.27	.42	46.14									
4-ton (60 kph) Gas Tandem	41,200	100	7.0	52.22	15.45	12.39	.49	80.55									
		120	(G)	44.81	15.45	12.39	.49	73.14	9.00	60.26	9.04	69.30	82.14	12.32	94.46		
		140		39.67	15.45	12.39	.49	68.00									
4-ton (80 kph) Die Tandem	48,700	100	4.1	61.73	18.26	6.97	.49	87.45									
		120	(D)	52.96	18.26	6.97	.49	78.68	9.00	71.22	10.68	81.90	87.68	13.15	100.83		
		140		46.89	18.26	6.97	.49	72.61									
Combine SP Standard																	
8000-10000 sq in	59,300	120	4.0	69.05	17.79	6.80	.35	93.99									
		150	(D)	57.52	17.79	6.80	.35	82.46									
		180		50.18	17.79	6.80	.35	75.12									
		350		29.88	17.79	6.80	.35	54.82	9.00	47.67	7.15	54.82	63.82	9.57	73.39	4.50 ac/hr	
10000-12000 sq in	67,000	120	5.0	78.01	20.10	8.50	.42	107.03									
		150	(D)	64.99	20.10	8.50	.42	94.01									
		180		56.70	20.10	8.50	.42	85.72									
		350		33.76	20.10	8.50	.42	62.78	9.00	53.86	8.08	61.94	71.78	10.77	82.75	5.50 ac/hr	
12000-14000 sq in	91,400	120	6.0	106.43	27.42	10.20	.42	144.47									
		150	(D)	88.66	27.42	10.20	.42	126.70									
		180		77.34	27.42	10.20	.42	115.38									
		350		46.06	27.42	10.20	.42	84.10	9.00	73.48	11.02	84.50	93.10	13.97	107.07	7.00 ac/hr	
14000-17000 sq in	100,350	120	6.5	117.14	30.18	11.05	.46	158.83									
		150	(D)	97.58	30.18	11.05	.46	139.27									
		180		85.13	30.18	11.05	.46	126.82									
		350		50.89	30.18	11.05	.46	82.38	9.00	80.87	12.13	93.00	101.38	15.21	116.59	8.50 ac/hr	
17000 + sq in	168,900	120	7.0	126.80	32.67	11.90	.63	172.00									
		150	(D)	105.63	32.67	11.90	.63	150.83									
		180		92.15	32.67	11.90	.63	137.35									
		350		54.87	32.67	11.90	.63	100.07	9.00	87.54	13.13	100.67	109.07	16.36	125.43	11.00 ac/hr	\$13.20/acre

Powered Equipment

				Machine Component Costs Per Hour					Machine Rental Per Hour			Custom Work Rates																					
Powered Equipment	Machine/Size	Orig. Cost	Ann. Hrs. Use	Fuel Type & Gal. /hr	Fixed Costs (\$/hr)	Repair Costs (\$/hr)	Fuel Costs (\$/hr)	Lube & Oil Costs (\$/hr)	Total Costs Per Hour (No Labor) (\$/hr)	Labour Costs (\$/hr)	Basic Rental Costs (\$/hr)	Margin (\$/hr)	Rental Rate (\$/hr)	Basic Custom Work Costs (\$/hr)	Margin (\$/hr)	Custom Rate (\$/hr)	Work Rate	Supp. Custom Rate per Acre															
Combine SP Rotary	Small	91,100	120	4.2 (D)	100.69	25.83	7.14	.49	134.15	9.00	69.22	10.38	79.60	85.85	12.88	98.73	7.00 ac/hr																
			150		83.52	25.83	7.14	.49	116.98																								
			180		72.86	25.83	7.14	.49	108.38																								
			350		43.39	25.83	7.14	.49	76.85																								
	Medium	100,700	120	5.5 (D)	125.94	32.31	9.35	.56	168.16	9.00	86.58	12.99	99.57	105.49	15.82	121.31	8.50 ac/hr																
			150		104.47	32.31	9.35	.56	146.69																								
			180		91.14	32.31	9.35	.56	133.36																								
			350		54.27	32.31	9.35	.56	96.49																								
	Large	120,000	120	7.0 (D)	144.42	37.05	11.90	.63	194.00	9.00	99.28	14.89	114.17	120.81	18.12	138.93	12.00 ac/hr	\$13.80/acre															
			150		119.80	37.05	11.90	.63	168.39																								
			180		104.51	37.05	11.90	.63	154.00																								
			350		62.23	37.05	11.90	.63	111.81																								
Grain Augers	6 inch 33-37 ft (w/12HP)	2,270	025	.2 (G)	10.94	.91	.35	.04	12.24	9.00	6.83	.102	7.86	See Custom Grain Hauling Section (Page 14)																			
			050		5.92	.91	.35	.04	7.22																								
			075		4.23	.91	.35	.04	5.55																								
	7 inch 40-42 ft (w/16HP)	2,500	025	.3 (G)	12.05	1.00	.53	.06	13.64	9.00	7.53	1.13	8.66						See Custom Grain Hauling Section (Page 14)														
			050		6.53	1.00	.53	.06	8.12																								
			075		4.66	1.00	.53	.06	6.25																								
	9 inch 45-52 ft PTO	2,800	025	.0 ()	10.60	.88	.17	.17	11.85	9.00	6.62	.99	7.61											See Custom Grain Hauling Section (Page 14)									
			050		5.74	.88	.17	.17	6.79																								
			075		4.10	.88	.17	.17	5.15																								
	10 inch 45-75 ft PTO	2,900	025	.0 ()	13.98	1.16	.21	.21	15.35	9.00	8.73	1.31	10.04																See Custom Grain Hauling Section (Page 14)				
			050		7.57	1.16	.21	.21	8.94																								
			075		5.40	1.16	.21	.21	6.77																								
Swathers SP	15'	24,000	060	1.8 (G)	48.77	4.80	3.19	.26	57.02	9.00	36.12	5.42	41.54	46.57	7.29	53.86	8.50 ac/hr																
			100		31.32	4.80	3.19	.26	39.57																								
			140		23.95	4.80	3.19	.26	32.20																								
	18'	24,300	060	2.0 (G)	49.38	4.86	3.54	.26	58.04	9.00	36.57	5.49	42.06	49.37	7.41	56.78	10.00 ac/hr																
			100		31.71	4.86	3.54	.26	40.37																								
			140		24.25	4.86	3.54	.26	32.91																								
	20'-22'	24,300	060	2.2 (G)	49.79	4.90	3.89	.26	58.84	9.00	36.87	5.53	42.40	50.02	7.50	57.52	12.00 ac/hr																
			100		31.97	4.90	3.89	.26	41.92																								
			140		24.45	4.90	3.89	.26	33.50																								
	24'	27,000	060	2.4 (G)	54.87	5.40	4.25	.32	64.84	9.00	40.64	6.10	46.74	54.21	8.13	62.34	14.00 ac/hr																
			100		35.24	5.40	4.25	.32	45.21																								
			140		26.95	5.40	4.25	.32	35.32																								
21'-22' DSA	30,000	060	2.4 (G)	60.96	6.00	4.25	.32	71.53	9.00	45.15	6.77	51.92	58.72	8.81	67.53	12.00 ac/hr	\$5.20/acre																
		100		39.15	6.00	4.25	.32	49.72																									
		140		29.94	6.00	4.25	.32	40.51																									
SP Bale Wagon 160 Bales (100 hp)	55,000	060	4.0 (G)	119.69	11.78	7.08	.35	138.90	9.00	88.64	13.30	101.94	105.07	15.76	120.80	375.00 bales/hr	\$5.20/acre																
		100		76.86	11.78	7.08	.35	96.07																									
		140		58.79	11.78	7.08	.35	78.00																									

Drawn Equipment

Drawn Equipment			Machine Component Costs Per Hour			Machine Rental Per Hour						Custom Work Rates				Sugg. Custom Rate Per Acre
			Fixed Costs (\$/hr)	Repair Costs (\$/hr)	Total Costs (\$/hr)	Basic Rental Costs (\$/hr)	Margin (\$/hr)	Rental Rate (\$/hr)				Basic Custom Work Costs (\$/hr)	Margin (\$/hr)	Custom Rate (\$/hr)	Work Rate	
Combine Pull-type 10000-12000 sq in	40,000	120	48.90	19.60	68.50											
		150	40.74	19.60	60.34											
		180	35.54	19.60	55.14											
		350	21.16	19.60	40.76	40.76	6.11	46.87	40.76	19.91	9.00	69.97	10.45	80.12	5.25 ac/hr	
120000-14000 sq in	81,500	120	59.62	23.90	83.52											
		150	49.66	23.90	73.56											
		180	43.33	23.90	67.23											
		350	25.80	23.90	49.70	49.70	7.46	57.16	49.70	22.27	9.00	80.97	12.55	93.12	6.50 ac/hr	
15000+	99,000	120	68.70	27.54	96.24											
		150	57.23	27.54	84.77											
		180	49.93	27.54	77.47											
		350	29.73	27.54	57.27	57.27	8.59	65.86	57.27	25.87	9.00	92.14	13.82	105.98	8.00 ac/hr	
Rotary PTO Large	82,000	120	72.19	28.94	101.13											
		150	60.14	28.94	89.08											
		180	52.46	28.94	81.40											
		350	31.24	28.94	60.18	60.18	9.03	69.21	60.18	29.24	9.00	98.42	14.76	113.18	11.00 ac/hr	\$12.7/ac
Swathers Pull-type 18'	5,800	060	11.79	2.03	13.82											
		100	7.57	2.03	9.60											
		140	5.79	2.03	7.82	9.60	1.44	11.04	9.60	10.11	9.00	28.71	4.31	33.02	9.50 ac/hr	
20'	6,200	060	12.60	2.17	14.77											
		100	8.09	2.17	10.26											
		140	6.19	2.17	8.36	10.26	1.54	11.80	10.26	10.11	9.00	29.37	4.41	33.78	11.50 ac/hr	
24'	7,100	080	14.43	2.49	16.92											
		100	9.27	2.49	11.76											
		140	7.09	2.49	9.58	11.76	1.76	13.52	11.76	10.11	9.00	30.87	4.63	35.50	13.00 ac/hr	
28'	7,800	060	15.85	2.73	18.58											
		100	10.18	2.73	12.91											
		140	7.79	2.73	10.52	12.91	1.94	14.85	12.91	10.11	9.00	32.02	4.80	36.82	15.00 ac/hr	\$2.85/ac
Heavy Duty Cultivators 18'-20'	8,500	150	6.75	1.83	8.58											
		250	4.33	1.83	6.16											
		350	3.31	1.83	5.14	6.16	.92	7.08	6.16	16.38	9.00	31.54	4.73	36.27	9.50 ac/hr	
23'-25'	11,100	150	9.02	2.44	11.46											
		250	5.79	2.44	8.23											
		350	4.43	2.44	6.87	8.23	1.23	9.46	8.23	24.61	9.00	41.84	6.28	48.12	12.00 ac/hr	
31'	13,800	150	10.97	2.97	13.94											
		250	7.05	2.97	10.02											
		350	5.39	2.97	8.36	10.02	1.50	11.52	10.02	28.46	9.00	47.48	7.12	54.60	15.50 ac/hr	
35'	14,700	150	11.95	3.23	15.18											
		250	7.67	3.23	10.90											
		350	5.87	3.23	9.10	10.90	1.64	12.54	10.90	32.14	9.00	52.04	7.81	59.85	17.50 ac/hr	
39'	15,800	150	12.84	3.48	16.32											
		250	8.25	3.48	11.73											
		350	6.31	3.48	9.79	11.73	1.76	13.49	11.73	37.64	9.00	58.37	8.76	67.13	19.50 ac/hr	
45'	18,300	150	15.69	4.25	20.94											
		250	10.07	4.25	14.32											
		350	7.70	4.25	11.95	14.32	2.15	16.47	14.32	55.59	9.00	78.91	11.84	90.75	24.50 ac/hr	\$3.85/ac

Drawn Equipment

Drawn Equipment			Machine Component Costs Per Hour			Machine Rental Per Hour						Custom Work Rates				Sugg. Custom Rate Per Acre
			Fixed Costs (\$/hr)	Repair Costs (\$/hr)	Total Costs (\$/hr)	Basic Rental Costs (\$/hr)	Margin (\$/hr)	Rental Rate (\$/hr)	Machine Total Costs (\$/hr)	Power Unit Total Costs (\$/hr)	Labor (\$/hr)	Basic Custom Work Costs (\$/hr)	Margin (\$/hr)	Custom Rate (\$/hr)	Work Rate	
Field Cultivators	17-19'	150	5.28	1.43	6.71											
		250	3.39	1.43	4.82	4.82	.72	5.54	4.82	12.38	9.00	26.20	3.93	35.13	10.00	
		350	2.59	1.43	4.02					65 hp					ac/hr	
	23'	150	6.50	1.76	8.26											
		250	4.18	1.76	5.94	5.94	.89	6.83	5.94	16.38	9.00	31.32	4.70	36.02	12.50	
		350	3.19	1.76	4.95					85 hp					ac/hr	
	29-32'	150	8.13	2.20	10.33											
		250	5.22	2.20	7.42	7.42	1.11	8.53	7.42	24.61	9.00	41.03	6.15	47.18	17.00	
		350	3.99	2.20	6.19					110 hp					ac/hr	
	37'	150	10.57	2.86	13.43											
		250	6.79	2.86	9.65	9.65	1.45	11.10	9.65	28.46	9.00	47.11	7.07	54.18	20.00	
		350	5.19	2.86	8.05					130 hp					ac/hr	
	45'	150	13.98	3.78	17.76											
		250	8.98	3.78	12.76	12.76	1.91	14.67	12.76	37.64	9.00	59.40	8.91	68.31	22.00	
		350	6.87	3.78	10.65					180 hp					ac/hr	
	51'	150	17.31	4.69	22.00											
		250	11.12	4.69	15.81	15.81	2.37	18.18	15.81	55.59	9.00	80.40	12.06	92.46	26.00	
		350	8.50	4.69	13.19					190 hp					ac/hr	\$5.00/acre
Rodweeder (without multiplex)	24'	060	8.53	2.31	10.84											
		100	5.48	2.31	7.79	7.79	1.17	8.96	7.79	10.11	9.00	26.90	4.04	30.94	13.00	
		140	4.19	2.31	6.50					55 hp					ac/hr	
	30'	060	11.79	3.19	14.98											
		100	7.57	3.19	10.76	10.76	1.61	12.37	10.76	14.82	9.00	34.58	5.19	39.77	16.50	
		140	5.79	3.19	8.98					75 hp					ac/hr	
	36'	060	13.21	3.58	16.79											
		100	8.48	3.58	12.06	12.06	1.81	13.87	12.06	21.99	9.00	43.05	6.46	49.51	17.50	
		140	6.49	3.58	10.07					95 hp					ac/hr	
	48'	060	21.34	5.78	27.12											
		100	13.70	5.78	19.48	19.48	2.92	22.40	19.48	28.46	9.00	56.94	8.54	65.48	27.00	
		140	10.48	5.78	16.26					130 hp					ac/hr	
	60'	060	25.20	6.82	32.02											
		100	16.18	6.82	23.00	23.00	3.45	26.45	23.00	32.14	9.00	64.14	9.62	73.76	33.00	
		140	12.38	6.82	19.20					150 hp					ac/hr	\$5.00/acre
Rodweeder (with multiplex)	24'	060	10.77	2.92	13.69											
		100	6.92	2.92	9.84	9.84	1.48	11.32	9.84	12.38	9.00	31.22	4.68	35.90	12.00	
		140	5.29	2.92	8.21					65 hp					ac/hr	
	30'	060	15.24	4.13	19.37											
		100	9.79	4.13	13.92	13.92	2.09	16.01	13.92	14.82	9.00	37.74	5.66	43.40	15.00	
		140	7.49	4.13	11.62					75 hp					ac/hr	
	36'	060	17.27	4.68	21.95											
		100	11.09	4.68	15.77	15.77	2.37	18.14	15.77	24.61	9.00	49.38	7.41	56.79	17.50	
		140	8.48	4.68	13.16					110 hp					ac/hr	
	48'	060	25.40	6.88	32.28											
		100	16.31	6.88	23.19	23.19	3.48	26.67	23.19	28.46	9.00	60.65	9.10	69.75	23.50	
		140	12.48	6.88	19.36					130 hp					ac/hr	
	60'	060	32.11	8.69	40.80											
		100	20.62	8.69	29.31	29.31	4.40	33.71	29.31	34.82	9.00	73.13	10.97	84.10	30.00	
		140	15.77	8.69	24.46					170 hp					ac/hr	\$5.00/acre

* Tine Harrows for Cult. or Rodweeder
Add \$.13/ft./hr to Custom or Rental Rate (\$.25/acre)

Drawn Equipment

Drawn Equipment			Machine Component Costs Per Hour			Machine Rental Per Hour						Custom Work Rates				Sugg. Custom Rate Per Acre
Machine/Size	Orig. Cost	Ann. Hrs. Use	Fixed Costs (\$/hr)	Repair Costs (\$/hr)	Total Costs (\$/hr)	Basic Rental Costs (\$/hr)	Margin (\$/hr)	Rental Rate (\$/hr)	Machine Total Costs (\$/hr)	Power Unit Total Costs (\$/hr)	Labor (\$/hr)	Basic Custom Work Costs (\$/hr)	Margin (\$/hr)	Custom Rate (\$/hr)	Work Rate	
Discers* (with seed and fert.) 15'	2,800	100	11.64	2.67	14.31											
		150	8.31	2.67	11.10	11.18	1.68	12.88	11.18	12.38	9.00	32.56	4.88	37.44	6.50 ac/hr	
		200	6.55	2.67	9.42											
24' Multi-unit	17,600	100	20.73	5.10	28.35											
		150	14.79	5.10	19.89	19.89	2.98	22.87	19.89	24.61	9.00	53.50	8.03	61.53	11.00 ac/hr	
		200	11.66	5.10	16.79											
30' Multi-unit	18,100	100	23.29	5.73	33.42											
		150	16.62	5.73	22.95	22.35	3.35	25.70	22.35	26.46	9.00	59.81	8.97	68.78	13.50 ac/hr	
		200	13.10	5.73	18.23											
36' Multi-unit	24,400	100	29.75	7.32	37.07											
		150	21.23	7.32	28.66	28.55	4.28	32.83	28.55	32.14	9.00	69.69	10.45	80.14	16.50 ac/hr	
		200	16.73	7.32	24.05											
45' Multi-unit	28,300	100	34.75	8.55	43.30											
		150	24.80	8.55	33.36	33.35	5.00	38.35	33.35	34.82	9.00	77.17	11.58	88.75	20.50 ac/hr	\$4.95/ac
		200	19.55	8.55	28.10											
Air Seeders (incl. cult.) 25'	30,400	080	61.78	13.68	75.46											
		100	39.67	13.68	53.35	53.35	8.00	61.35	53.35	28.46	9.00	90.81	13.62	104.43	12.50 ac/hr	
		140	30.34	13.68	44.02											
35'	38,600	080	79.05	17.51	96.56											
		100	50.76	17.51	68.27	68.27	10.24	78.51	68.27	34.82	9.00	112.09	16.81	128.90	17.50 ac/hr	
		140	38.83	17.51	56.34											
40'	43,800	080	89.01	19.71	108.72											
		100	57.16	19.71	76.87	76.87	11.53	88.40	76.87	55.59	9.00	141.46	21.22	162.68	20.00 ac/hr	\$7.50/ac
		140	43.72	19.71	63.43											
No till (w/fert) 26' Multi-unit	34,100	080	69.29	15.35	84.64											
		100	44.50	15.35	59.85	59.85	8.98	68.83	59.85	28.46	9.00	97.31	14.60	111.91	14.00 ac/hr	
		140	34.04	15.35	49.39											
42' Multi-unit	58,300	080	114.81	25.43	140.24											
		100	73.73	25.43	99.16	99.16	14.87	114.03	99.16	55.59	9.00	163.75	24.56	188.31	21.00 ac/hr	\$8.88/ac
		140	56.39	25.43	81.82											

* If Pulling Packers add \$.27/ft/hr to the Custom or Rental rate (\$.60/acre).

Drawn Equipment

Drawn Equipment			Machine Component Costs Per Hour			Machine Rental Per Hour						Custom Work Rates				Sugg. Custom Rate Per Acre
Machine/Size	Orig. Cost	Ann. Hrs. Use	Fixed Costs (\$/hr)	Repair Costs (\$/hr)	Total Costs (\$/hr)	Basic Rental Costs (\$/hr)	Margin (\$/hr)	Rental Rate (\$/hr)	Machine Total Costs (\$/hr)	Power Unit Total Costs (\$/hr)	Labor (\$/hr)	Basic Custom Work Costs (\$/hr)	Margin (\$/hr)	Custom Rate (\$/hr)	Work Rate	
Disc-Press Drill (w/hrt) 10'12'	8,700	060	19.71	4.37	24.08	17.03	2.55	19.58	17.03	10.11	9.00	36.14	5.42	41.56	5.00 ac/hr	
		100	12.66	4.37	17.03											
		140	9.66	4.37	14.03											
16' Multi-unit	15,800	060	32.31	7.16	39.47	27.91	4.19	32.10	27.91	12.38	9.00	49.29	7.39	56.68	8.00 ac/hr	
		100	20.75	7.16	27.91											
		140	15.87	7.16	23.03											
20' Multi-unit	18,800	060	38.20	8.46	46.66	32.99	4.95	37.94	32.99	14.82	9.00	56.81	8.52	65.33	10.00 ac/hr	
		100	24.53	8.46	32.99											
		140	18.76	8.46	27.22											
24' Multi-unit	21,900	060	44.50	9.86	54.36	38.44	5.77	44.21	38.44	21.99	9.00	60.43	10.41	79.84	13.00 ac/hr	
		100	28.58	9.86	38.44											
		140	21.86	9.86	31.72											
30' Multi-unit Hyd. Trans	32,300	060	65.64	14.54	80.18	56.69	8.50	65.19	56.69	24.61	9.00	90.30	13.55	103.85	15.00 ac/hr	
		100	42.15	14.54	56.69											
		140	32.24	14.54	46.78											
40' Multi-unit Hyd. trans	43,500	060	88.40	19.58	107.98	76.35	11.45	87.80	76.35	28.40	9.00	113.81	17.07	130.88	20.00 ac/hr	
		100	56.77	19.58	76.35											
		140	43.42	19.58	63.00											
Hoe-Press Drill (w/hrt) 12'	9,200	060	18.70	4.14	22.84	16.15	2.42	18.57	16.15	12.38	9.00	37.53	5.63	43.16	7.00 ac/hr	
		100	12.01	4.14	16.15											
		140	9.18	4.14	13.32											
16' Multi-unit	14,000	060	28.45	6.30	34.75	24.57	3.69	28.26	24.57	14.82	9.00	48.39	7.26	55.65	8.00 ac/hr	
		100	18.27	6.30	24.57											
		140	13.97	6.30	20.27											
20' Multi-unit	18,700	060	38.00	8.42	46.42	32.82	4.92	37.74	32.82	21.99	9.00	63.81	9.57	73.38	10.00 ac/hr	
		100	24.40	8.42	32.82											
		140	18.66	8.42	27.08											
24' Multi-unit	21,000	060	42.67	9.45	52.12	36.86	5.53	42.39	36.86	24.61	9.00	70.47	10.57	81.04	13.00 ac/hr	
		100	27.41	9.45	36.86											
		140	20.96	9.45	30.41											
30' Multi-unit Hyd. trans	31,800	060	64.01	14.18	78.19	55.29	8.29	63.58	55.29	28.46	9.00	92.75	13.91	106.66	15.00 ac/hr	
		100	41.11	14.18	55.29											
		140	31.44	14.18	45.62											
40' Multi-unit Hyd. trans	41,800	060	85.14	18.86	104.00	73.54	11.03	84.57	73.54	32.14	9.00	114.68	17.20	131.88	20.00 ac/hr	
		100	54.68	18.86	73.54											
		140	41.82	18.86	60.68											
Sprayers* 250-300 gal 55'-60'	4,800	030	16.26	3.60	19.86	14.04	2.11	16.15	14.04	8.74	9.00	31.78	4.77	36.55	22.00 ac/hr	
		050	10.44	3.60	14.04											
		070	7.98	3.60	11.58											
400 gal 60'-70'	6,300	030	21.54	4.77	26.31	18.60	2.79	21.39	18.60	10.11	9.00	37.71	5.86	43.57	22.00 ac/hr	
		050	13.83	4.77	18.60											
		070	10.58	4.77	15.35											
800 gal 70'-80'	7,000	030	28.45	6.30	34.75	24.57	3.69	28.26	24.57	10.11	9.00	43.68	6.55	50.23	25.00 ac/hr	
		050	18.27	6.30	24.57											
		070	13.97	6.30	20.27											

* If the custom sprayer supplies truck, tank and pump add \$.40/acre.

Drawn Equipment

Drawn Equipment			Machine Component Costs Per Hour			Machine Rental Per Hour						Custom Work Rates				Sugg. Custom Rate Per Acre
Machine/Size	Orig. Cost	Ann. Hrs. Use	Fixed Costs (\$/hr)	Repair Costs (\$/hr)	Total Costs (\$/hr)	Basic Rental Costs (\$/hr)	Margin (\$/hr)	Rental Rate (\$/hr)	Machine Total Costs (\$/hr)	Power Unit Total Costs (\$/hr)	Labor (\$/hr)	Basic Custom Work Costs (\$/hr)	Margin (\$/hr)	Custom Rate (\$/hr)	Work Rate	
Harrow DBR 14-harrow 40'-50'	6,500	040	22.85	4.87	27.72	20.92	3.14	24.86	20.92	12.38 65 hp	9.00	42.30	6.35	48.65	26.00 ac/hr	
		060	16.05	4.87	20.92											
		080	12.79	4.87	17.66											
50'-60'	8,500	040	24.75	5.28	30.03	22.67	3.40	26.07	22.67	16.38 85 hp	9.00	48.05	7.21	55.26	30.25 ac/hr	
		060	17.39	5.28	22.67											
		080	13.85	5.28	19.13											
60'-70'	7,700	040	29.32	6.25	35.57	26.85	4.03	30.88	26.85	21.99 95 hp	9.00	57.84	8.68	66.52	36.00 ac/hr	\$1.85/ac
		060	20.80	6.25	27.05											
		080	16.41	6.25	22.66											
Harrow-Packers 35'-40'	11,800	040	44.93	9.58	54.51	41.15	6.17	47.32	41.15	21.99 95 hp	9.00	72.14	10.82	82.96	19.00 ac/hr	
		060	31.57	9.58	41.15											
		080	25.15	9.58	34.73											
45'-50'	13,800	040	52.55	11.20	63.75	48.12	7.22	55.34	48.12	24.61 110 hp	9.00	81.73	12.26	93.99	24.00 ac/hr	
		060	36.92	11.20	48.12											
		080	29.41	11.20	40.61											
60'-70'	15,800	040	60.17	12.82	72.99	55.09	8.26	63.35	55.09	28.46 130 hp	9.00	92.55	13.88	106.43	32.50 ac/hr	\$3.75/ac
		060	42.27	12.82	55.09											
		080	33.67	12.82	46.49											
Tandem Discs 14'	7,200	100	8.78	2.16	10.94	8.42	1.26	9.68	8.42	12.38 65 hp	9.00	29.80	4.47	34.27	7.00 ac/hr	
		150	6.26	2.16	8.42											
		200	4.94	2.16	7.10											
16'	8,900	100	11.58	2.85	14.43	11.12	1.67	12.79	11.12	14.82 75 hp	9.00	34.94	5.24	40.18	8.00 ac/hr	
		150	8.27	2.85	11.12											
		200	6.52	2.85	9.37											
19'	12,000	100	14.63	3.60	18.23	14.04	2.11	16.15	14.04	24.61 110 hp	9.00	47.65	7.15	54.80	9.50 ac/hr	
		150	10.44	3.60	14.04											
		200	8.23	3.60	11.83											
21'	12,760	100	15.49	3.81	19.30	14.86	2.23	17.09	14.86	24.61 110 hp	9.00	48.47	7.27	55.74	10.50 ac/hr	
		150	11.05	3.81	14.86											
		200	8.71	3.81	12.52											
24'	14,400	100	17.56	4.32	21.88	16.85	2.53	19.38	16.85	28.46 130 hp	9.00	54.31	8.15	62.46	12.00 ac/hr	
		150	12.53	4.32	16.85											
		200	9.88	4.32	14.20											
28'	17,000	100	21.46	5.28	26.74	20.59	3.09	23.68	20.59	28.46 130 hp	9.00	58.05	8.71	66.76	14.00 ac/hr	
		150	15.31	5.28	20.59											
		200	12.07	5.28	17.35											
31'	19,400	100	23.65	5.82	29.47	22.70	3.41	26.11	22.70	32.14 150 hp	9.00	63.84	9.58	73.42	15.50 ac/hr	\$6.25/ac
		150	16.88	5.82	22.70											
		200	13.30	5.82	19.12											
Flows 7.5' 5-furrow	9,700	100	11.83	5.34	17.17	13.78	2.07	15.85	13.78	12.38 65 hp	9.00	35.16	5.27	40.43	3.00 ac/hr	
		150	8.44	5.34	13.78											
		200	6.78	5.34	12.12											
9' 6-furrow	11,300	100	13.66	6.16	19.82	15.90	2.39	18.29	15.90	14.82 75 hp	9.00	39.72	5.96	45.68	3.60 ac/hr	
		150	9.74	6.16	15.90											
		200	7.83	6.16	13.99											
12' 8-furrow	14,800	100	17.90	8.03	25.93	20.73	3.11	23.84	20.73	21.99 95 hp	9.00	51.72	7.76	59.48	4.80 ac/hr	
		150	12.70	8.03	20.73											
		200	10.20	8.03	18.23											
15' 10-furrow	16,800	100	24.14	10.89	35.03	28.12	4.22	32.34	28.12	24.61 110 hp	9.00	61.73	9.26	70.99	6.40 ac/hr	\$12.15/ac
		150	17.23	10.89	28.12											
		200	13.83	10.89	24.72											

Drawn Equipment

Drawn Equipment			Machine Component Costs Per Hour			Machine Rental Per Hour						Custom Work Rates				Total Custom Rate Per Acre
Machine Size	Orig. Cost	Ann. Mns. Use	Fixed Costs (\$/hr)	Repair Costs (\$/hr)	Total Costs (\$/hr)	Basic Rental Costs (\$/hr)	Margin (\$/hr)	Rental Rate (\$/hr)	Machine Total Costs (\$/hr)	Power Unit Total Costs (\$/hr)	Labor (\$/hr)	Basic Custom Work Costs (\$/hr)	Margin (\$/hr)	Custom Rate (\$/hr)	Work Rate	
Balers																
Round Exact Name Small	7,800	040	25.74	1.98	26.72	17.83	2.67	20.50	17.83	12.38 65 hp	9.00	38.21	5.88	45.09	150.00 bales/hr	\$3.30/bale
		080	15.85	1.98	17.83											
		120	11.61	1.98	13.59											
Medium	9,800	040	35.65	2.45	38.10	22.11	3.32	25.43	22.11	12.38 65 hp	9.00	43.49	6.52	50.01	175.00 bales/hr	
		080	19.66	2.45	22.11											
		120	14.41	2.45	16.86											
Large	12,500	040	44.38	3.05	47.43	27.53	4.13	31.66	27.53	12.38 65 hp	9.00	48.91	7.34	56.25	200.00 bales/hr	
		080	24.48	3.05	27.53											
		120	17.93	3.05	20.98											
Baler																
Round Exact Name 750-1000 lbs	11,700	030	51.70	2.93	54.63	31.30	4.70	36.00	31.30	12.38 65 hp	9.00	52.68	7.90	60.58	18.00 bales/hr	\$5.85/bale
		060	28.37	2.93	31.30											
		090	20.31	2.93	23.24											
1500 lbs	13,800	030	60.98	3.45	64.43	36.92	5.54	42.46	36.92	12.38 65 hp	9.00	58.30	8.75	67.05	11.00 bales/hr	
		060	33.47	3.45	36.92											
		090	27.95	3.45	31.40											
1700 lbs	17,900	030	77.33	4.38	81.71	46.82	7.02	53.84	46.82	14.82 75 hp	9.00	70.64	10.60	81.24	8.00 bales/hr	
		060	42.44	4.38	46.82											
		090	30.37	4.38	34.75											
Bale-wagon																
Pull-type 55 bale	12,500	060	25.40	4.38	29.78	20.69	3.10	23.79	20.69	10.11 55 hp	9.00	39.80	5.97	45.77	100.00 bales/hr	\$3.30/bale
		100	16.31	4.38	20.69											
		140	12.48	4.38	16.86											
69 bale	18,800	060	38.20	6.58	44.78	31.11	4.67	35.78	31.11	10.11 55 hp	9.00	50.22	7.53	57.75	140.00 bales/hr	
		100	24.53	6.58	31.11											
		140	18.76	6.58	25.34											
104 bale	21,000	060	42.67	7.35	50.02	34.76	5.21	40.97	34.76	14.82 75 hp	9.00	58.58	8.79	67.37	208.00 bales/hr	
		100	27.41	7.35	34.76											
		140	20.96	7.35	28.31											
Big Bale																
Blower 3-4 bale	3,200	040	10.61	1.00	11.61	6.82	1.02	7.84	6.82	8.74 45 hp	9.00	24.56	3.68	28.24		
		080	5.82	1.00	6.82											
		120	4.17	1.00	5.17											
5-6 bale	4,200	040	13.92	1.31	15.23	8.95	1.34	10.29	8.95	12.38 65 hp	9.00	30.33	4.55	34.88		
		080	7.64	1.31	8.95											
		120	5.47	1.31	6.78											
8 bale	8,000	040	26.51	2.50	29.01	17.05	2.56	19.61	17.05	16.38 85 hp	9.00	42.43	6.36	48.79		
		080	14.55	2.50	17.05											
		120	10.41	2.50	12.91											
Mower																
Conditioner 7'	8,300	050	23.20	3.56	26.76	20.81	3.12	23.93	20.81	8.74 45 hp	9.00	38.55	5.78	44.33	4.50 ac/hr	
		070	17.25	3.56	20.81											
		090	14.05	3.56	17.61											
8'	9,800	050	27.39	4.20	31.59	24.57	3.69	28.26	24.57	8.74 45 hp	9.00	42.31	6.35	48.66	5.80 ac/hr	
		070	20.37	4.20	24.57											
		090	16.59	4.20	20.79											
12'	15,100	050	42.20	6.47	48.67	37.86	5.68	43.54	37.86	10.11 55 hp	9.00	56.97	8.55	65.52	6.40 ac/hr	
		070	31.39	6.47	37.86											
		090	25.56	6.47	32.03											
14'	18,800	050	43.80	6.69	50.49	39.12	5.87	44.99	39.12	10.11 55 hp	9.00	58.23	8.73	66.96	7.00 ac/hr	
		070	32.43	6.69	39.12											
		090	26.40	6.69	33.09											
* If the baler is equipped with a bale conditioner, use the conditioner rates.																

* If the baler is equipped with a bale thrower add \$7.00/hr to the custom and rental rate or \$.04/bale.

Drawn Equipment

Drawn Equipment			Machine Component Costs Per Hour			Machine Rental Per Hour						Custom Work Rates				
Machine/Size	Orig. Cost	Ann. Hrs. Use	Fixed Costs (\$/hr)	Repair Costs (\$/hr)	Total Costs (\$/hr)	Basic Rental Costs (\$/hr)	Margin (\$/hr)	Rental Rate (\$/hr)	Machine Total Costs (\$/hr)	Power Unit Total Costs (\$/hr)	Labor (\$/hr)	Basic Custom Work Costs (\$/hr)	Margin (\$/hr)	Custom Rate (\$/ac)	Work Rate	Sugg. Custom Rate Per Acre
Mowers Sickle																
7'	3,000	050 070 090	8.38 6.24 5.08	1.29 1.29 1.29	9.67 7.53 6.37	7.53	1.13	8.66	7.53	6.36 35 hp	9.00	22.89	3.43	26.32	3.50 ac/hr	
8'	3,500	050 070 090	9.78 7.28 5.92	1.50 1.50 1.50	11.28 8.78 7.42	8.78	1.32	10.10	8.78	6.36 35 hp	9.00	24.14	3.62	27.76	4.50 ac/hr	38.75/ac
Hay-rakes																
8 1/2' Parallel Bar	3,000	050 070 090	8.38 6.24 5.08	1.29 1.29 1.29	9.67 7.53 6.37	7.53	1.13	8.66	7.53	6.36 35 hp	9.00	22.89	3.43	26.32	4.50 ac/hr	
9 1/2' Parallel Bar	3,500	050 070 090	9.78 7.28 5.92	1.50 1.50 1.50	11.28 8.78 7.42	8.78	1.32	10.10	8.78	6.36 35 hp	9.00	24.14	3.62	27.76	5.00 ac/hr	
7 1/2' Wheel rake	2,300	050 070 090	6.43 4.76 3.89	.99 .99 .99	7.42 5.77 4.88	5.77	.87	6.64	5.77	6.36 35 hp	9.00	21.13	3.17	24.30	4.00 ac/hr	
9 1/2' Wheel Rake	2,800	050 070 090	7.27 5.40 4.40	1.11 1.11 1.11	8.38 6.51 5.51	6.51	.98	7.49	6.51	6.36 35 hp	9.00	21.87	3.28	25.15	5.00 ac/hr	35.80/ac
Rotary Cutters																
5'	2,100	050 070 090	5.87 4.37 3.55	.90 .90 .90	6.77 5.27 4.45	5.27	.79	6.06	5.27	12.38 65 hp	9.00	26.65	4.00	30.65		
6' h.d.	3,000	050 070 090	8.38 6.24 5.08	1.29 1.29 1.29	9.67 7.53 6.37	7.53	1.13	8.66	7.53	12.38 65 hp	9.00	28.91	4.34	33.25		
14' h.d.	5,900	050 070 090	16.49 12.26 9.99	2.53 2.53 2.53	19.02 14.79 12.52	14.79	2.22	17.01	14.79	12.38 65 hp	9.00	36.17	5.43	41.60		
Loose Hay Stackers																
2-5 ton	18,800	040 080 120	65.62 36.01 25.78	6.19 6.19 6.19	71.81 42.20 31.97	42.20	6.33	48.53	42.20	21.99 95 hp	9.00	73.19	10.98	84.17	8.00 ac/hr	
6 tons plus	31,000	040 080 120	102.74 56.38 40.36	9.69 9.69 9.69	112.43 66.07 50.05	66.07	9.91	75.98	66.07	24.61 110 hp	9.00	99.68	14.95	114.63	14.00 ac/hr	39.05/ac
Loose Hay Stack Movers																
2-5 ton	4,700	040 080 120	15.58 8.55 6.12	1.47 1.47 1.47	17.05 10.02 7.59	10.02	1.50	11.52	10.02	12.38 65 hp	9.00	31.40	4.71	36.11		
6 ton plus	12,000	040 080 120	39.77 21.83 15.62	3.75 3.75 3.75	43.52 25.58 19.37	25.58	3.84	29.42	25.58	21.99 95 hp	9.00	56.67	8.49	65.06		
Loose Hay Stackfeeders																
2-5 ton	7,700	040 080 120	25.52 14.00 10.02	2.41 2.41 2.41	27.93 16.41 12.43	16.41	2.46	18.87	16.41	10.11 55 hp	9.00	35.52	5.33	40.85		
6 ton plus	9,800	040 080 120	32.48 17.82 12.76	3.06 3.06 3.06	35.54 20.88 15.82	20.88	3.13	24.01	20.88	12.38 65 hp	9.00	42.26	6.34	48.60		

Drawn Equipment

Drawn Equipment			Machine Component Costs Per Hour			Machine Rental Per Hour						Custom Work Rates				
Machine/Size	Orig. Cost	Ann. Hrs. Use	Fixed Costs (\$/hr)	Repair Costs (\$/hr)	Total Costs (\$/hr)	Basic Rental Costs (\$/hr)	Margin (\$/hr)	Rental Rate (\$/hr)	Machine Total Costs (\$/hr)	Power Unit Total Costs (\$/hr)	Labor (\$/hr)	Basic Custom Work Costs (\$/hr)	Margin (\$/hr)	Custom Rate (\$/hr)	Work Rate	Supp. Custom Rate Per Acre
Forage Harvester PTO w/pick-up Small	11,700	040	36.78	3.66	40.44	24.94	3.74	28.68	24.94	12.38 65 hp	9.00	46.32	6.95	59.27		
		080	21.28	3.66	24.94											
		120	15.23	3.66	18.89											
	13,700	040	45.40	4.28	49.68	29.20	4.38	33.58	29.20	16.38 85 hp	9.00	54.58	8.19	62.77		
		080	24.92	4.28	29.20											
		120	17.83	4.28	22.11											
	17,200	040	57.00	5.38	62.38	36.66	5.50	42.16	36.66	32.14 150 hp	9.00	77.80	11.67	89.47		
		080	31.28	5.38	36.66											
		120	22.30	5.38	27.77											
Grinder Blaser 80-95 Bus	9,300	100	12.06	1.66	13.72	8.32	1.25	9.57	8.32	16.38 85 hp	9.00	33.70	5.06	38.76		
		200	6.66	1.66	8.32											
		300	4.88	1.66	6.54											
	11,000	100	16.01	2.20	18.21	11.03	1.65	12.68	11.03	24.61 110 hp	9.00	44.64	6.70	51.34		
		200	8.63	2.20	10.83											
		300	6.47	2.20	8.67											
Tub Grinder Small	14,800	100	20.37	2.80	23.17	14.04	2.11	16.15	14.04	24.61 110 hp	9.00	47.65	7.15	54.80		
		200	11.24	2.80	14.04											
		300	8.23	2.80	11.03											
	24,300	100	35.65	4.90	40.55	24.56	3.66	28.22	24.56	34.82 170 hp	9.00	68.38	10.26	78.64		
		200	19.86	4.90	24.76											
		300	14.40	4.90	19.30											
Front-end Loaders Standard w/bucket	3,750	060	7.04	.62	7.66	6.56	.98	7.54	6.56	12.38 65 hp	9.00	27.94	4.19	32.13		
		100	5.94	.62	6.56											
		120	5.26	.62	5.88											
	4,700	080	8.95	.79	9.74	8.33	1.25	9.58	8.33	21.99 95 hp	9.00	39.32	5.90	45.22		
		100	7.54	.79	8.33											
		120	6.66	.79	7.47											
Stone-picker Paddle-type PTO Drive	6,300	060	21.07	5.81	26.88	22.46	3.37	25.83	22.46	12.38 65 hp	9.00	43.84	6.58	50.42		
		080	16.65	5.81	22.46											
		100	14.15	5.81	19.96											
	7,200	060	18.26	5.04	23.30	19.49	2.92	22.41	19.49	21.99 95 hp	9.00	50.48	7.57	58.05		
		080	14.45	5.04	19.49											
		100	12.28	5.04	17.32											
Rock-Rakes 12'	6,000	060	14.22	3.92	18.14	15.16	2.27	17.43	15.16	12.38 65 hp	9.00	36.54	5.48	42.02		
		080	11.24	3.92	15.16											
		100	9.55	3.92	13.47											
	7,000	060	17.77	4.90	22.67	18.94	2.84	21.78	18.94	12.38 65 hp	9.00	40.32	6.05	46.37		
		080	14.04	4.90	18.94											
		100	11.94	4.90	16.84											
Rockomatic w/rock rake 12'	9,000	060	25.13	6.93	32.06	26.79	4.02	30.81	26.79	21.99 95 hp	9.00	57.78	8.67	66.45		
		080	19.95	6.93	26.88											
		100	16.86	6.93	23.79											
	13,000	060	33.00	9.10	42.10	35.18	5.26	40.44	35.18	21.99 95 hp	9.00	66.17	9.93	76.10		
		080	26.06	9.10	35.16											
		100	22.17	9.10	31.27											

Drawn Equipment

Drawn Equipment			Machine Component Costs Per Hour			Machine Rental Per Hour						Custom Work Rates				Sugg. Custom Rate Per Acre
Machine Size	Orig. Cost	Ann. Hrs. Use	Fixed Costs (\$/hr)	Repair Costs (\$/hr)	Total Costs (\$/hr)	Basic Rental Costs (\$/hr)	Margin (\$/hr)	Rental Rate (\$/hr)	Machine Total Costs (\$/hr)	Power Unit Total Costs (\$/hr)	Labor (\$/hr)	Basic Custom Work Costs (\$/hr)	Margin (\$/hr)	Custom Rate (\$/hr)	Work Rate	
Post Pounder	2,400	080	4.57	.40	4.97											
		100	3.85	.40	4.25	4.25	.64	4.89	4.25	10.11	9.00	23.36	3.50	26.86		
		120	3.41	.40	3.81					55 hp						
Manure Spreader 180-185 Bus	5,800	080	12.89	3.50	16.39											
		080	10.03	3.50	13.53	13.53	2.03	15.56	13.53	10.11	9.00	32.64	4.90	37.54		
		100	8.53	3.50	12.03					55 hp						
205-230 Bus	5,800	080	15.74	4.34	20.08											
		080	12.44	4.34	16.78	16.78	2.52	19.30	16.78	10.11	9.00	35.89	5.38	41.27		
		100	10.57	4.34	14.91					55 hp						
275-295 Bus	7,800	060	20.05	5.53	25.58											
		080	15.85	5.53	21.38	21.38	3.21	24.59	21.38	14.82	9.00	45.20	6.78	51.98		
		100	13.47	5.53	19.00					75 hp						
340-385 Bus	9,800	060	24.37	6.72	31.09											
		080	19.26	6.72	25.98	25.98	3.90	29.88	25.98	18.38	9.00	51.36	7.70	59.06		
		100	16.37	6.72	23.09					85 hp						
Liquid Manure Spreaders 500-750 gal	6,800	120	8.25	2.46	10.71											
		140	7.45	2.46	9.91	9.91	1.49	11.40	9.91	10.11	9.00	29.02	4.35	33.37		
		160	6.93	2.46	9.39					55 hp						
1000-1200 gal	9,800	120	12.19	3.63	15.82											
		140	11.01	3.63	14.64	14.64	2.20	16.84	14.64	14.82	9.00	38.46	5.77	44.23		
		160	10.23	3.63	13.86					75 hp						
Snow Blowers 7' Front Mount	6,200	020	37.36	5.43	42.79											
		040	20.23	5.43	25.66	25.66	3.85	29.51	25.66	21.99	9.00	56.65	8.50	65.15		
		100	9.95	5.43	15.38					95 hp						
8' Front Mount	8,700	020	40.37	5.86	46.23											
		040	21.86	5.86	27.72	27.72	4.16	31.88	27.72	21.99	9.00	58.71	8.81	67.52		
		100	10.75	5.86	16.61					95 hp						
7' Rear Mount	3,000	020	18.08	2.63	20.71											
		040	9.79	2.63	12.42	12.42	1.86	14.28	12.42	12.38	9.00	33.80	5.07	38.87		
		100	4.82	2.63	7.45					85 hp						
8' Rear Mount	3,800	020	23.50	3.41	26.91											
		040	12.72	3.41	16.13	16.13	2.42	18.55	16.13	12.38	9.00	37.51	5.63	43.14		
		100	6.28	3.41	9.69					85 hp						
Pneumatic Grain Mower 1000-1200 Bus/hr	5,800	025	42.90	3.56	46.46											
		050	23.23	3.56	26.79	26.79	4.02	30.81	26.79	14.82	9.00	50.61	7.58	58.19	1100.00 bus/hr	
		075	16.58	3.56	20.14					75 hp						
1500-1800 Bus/hr	10,000	025	57.84	4.80	62.64											
		050	31.32	4.80	36.12	36.12	5.42	41.54	36.12	21.99	9.00	67.11	10.07	77.18	1800.00 bus/hr	
		075	22.36	4.80	27.16					95 hp						
Bulk Applicators 20'-34'	5,800	080	13.95	3.85	17.80											
		080	11.03	3.85	14.88	14.88	2.23	17.11	14.88	10.11	9.00	33.99	5.10	39.09	15.50 ac/hr	
		100	9.38	3.85	13.23					55 hp						
28'-30'	6,800	060	16.50	4.55	21.05											
		080	13.04	4.55	17.59	17.59	2.84	20.43	17.59	12.38	9.00	38.97	5.85	44.82	20.00 ac/hr	
		100	11.08	4.55	15.63					85 hp						
36'	7,800	060	20.05	5.53	25.58											
		080	15.85	5.53	21.38	21.38	3.21	24.59	21.38	18.38	9.00	48.76	7.01	55.77	25.00 ac/hr	
		100	13.47	5.53	19.00					85 hp						

Custom Grain Hauling

A Farm to Market 0-25 miles

- (a) Truck — 3 Ton, 320 Bushel: Truck Costs \$43.64/hour (excl. labour)
 (b) Auger — 7" x 40' Gas Engine: Auger Costs \$8.12/hour (excl. labour)
 (c) Labour — \$9.00/hour
 (d) Unload Time: 10 minutes at elevator (truck engine and PTO running 5 minutes)

Distances to Market (miles)	0	5	10	15	20	25	30
Auger Costs Per Load	\$ 2.71	\$ 2.71	\$ 2.71	\$ 2.71	\$ 2.71	\$ 2.71	\$ 2.71
Time Minutes	(20)	(20)	(20)	(20)	(20)	(20)	(20)
Truck Costs Per Load	\$12.36	\$18.91	\$25.46	\$31.28	\$36.37	\$42.19	\$52.37
Time minutes	(17)	(26)	(35)	(43)	(50)	(58)	(72)
Labour Costs Per Load	\$ 6.30	\$ 7.65	\$ 9.00	\$10.20	\$11.25	\$12.45	\$14.55
Total Time: minutes	(42)	(51)	(60)	(68)	(75)	(83)	(97)
Total Cost Per Load	\$21.37	\$29.27	\$37.17	\$44.19	\$50.33	\$57.35	\$69.83
Margin Per Load	\$ 3.21	\$ 4.39	\$ 5.56	\$ 6.63	\$ 7.55	\$ 8.60	\$10.41
Custom Rate Per Load (320 bushel load)	\$24.58	\$33.66	\$42.73	\$50.82	\$57.88	\$66.95	\$80.27
Custom Rate/Bushel	7.7%	10.5%	13.4%	15.9%	18.1%	20.9%	25.0%
Suggested Custom Rate	30 per Bushel for first 5 miles to market plus .50 per Bushel for each additional mile.						

B Field to Yard

- (a) Truck — 3 Ton, 260 Bushel/Trip: Truck Costs \$43.64/hour (excl. labour)
 (b) Auger — 7" x 40' Gas Engine: Auger Costs \$8.12/hour (excl. labour)
 (c) Labour — \$9.00/hour
 (d) Unload Time: 11 minutes at Bin (truck engine and PTO running 5 minutes)

(1) Time Use

Distances: Field to Yard (Miles)	1/2	1	1 1/2	2	3	4
Travel Time to Yard and Return	4 min.	6.5 min.	8.5 min.	10 min.	12 min.	15.5 min.
Total Unload Time at Bin (Time truck running during unload at bin)	11 min. (5 min.)	11 min. (5 min.)	11 min. (5 min.)	11 min. (5 min.)	11 min. (5 min.)	11 min. (5 min.)
Time: Unload at combine(s) and travel in field unload twice from one combine or one each from two combines	10 min.	10 min.	10 min.	10 min.	10 min.	10 min.
Waiting Time in Field (truck not running)						
(a) hauling from one combine	47 min.	44.5 min.	42.5 min.	41 min.	39 min.	35.5 min.
(b) hauling from two combines	11 min.	8.5 min.	6.5 min.	5 min.	3 min.	0 min.
Total Time/Trip						
(a) hauling from one combine	72 min.	72 min.	72 min.	72 min.	72 min.	72 min.
(b) hauling from two combines	36 min.	36 min.	36 min.	36 min.	36 min.	36 min.
(2) Costs Components/Trip						
(a) Truck Costs/Trip	\$13.82	\$15.63	\$17.09	\$18.18	\$19.64	\$22.18
(b) Auger Costs/Trip	\$ 1.49	\$ 1.49	\$ 1.49	\$ 1.49	\$ 1.49	\$ 1.49
(c) Labour Costs/Trip						
— hauling from one combine	\$10.80	\$10.80	\$10.80	\$10.80	\$10.80	\$10.80
— hauling from two combines	\$ 5.40	\$ 5.40	\$ 5.40	\$ 5.40	\$ 5.40	\$ 5.40

(3) Custom Rate/Hour (incl. 10% margin)

Hauling from One Combine

(a) Excluding Auger	\$25.99	\$25.25	\$23.73	\$27.77	\$29.17	\$31.81
(b) Including Auger	\$25.92	\$25.75	\$23.16	\$27.28	\$28.68	\$31.33

Hauling from Two Combines

(a) Excluding Auger	\$26.94	\$24.31	\$20.11	\$16.29	\$17.99	\$22.99
(b) Including Auger	\$26.89	\$24.16	\$19.59	\$16.05	\$17.49	\$22.73

Appendix A

Combine Cleaning and Separating Area (in²) (excluding rotary combines)

Model No.	Cl. and Sep. Area*	Model No.	Cl. and Sep. Area*
Co-op Implements		Massey Ferguson	
9500	10,933	540	10,700
		550	12,240
		850	16,390
		851	16,390
		880	18,865
Cleaver (Allis-Chalmers)		White	
F ₃	10,790	5542	9,996
M ₃	14,500	7300	8,152
L ₃	17,155	8700 and 8850	12,556
		8900	Est. 13,000 m ² +
John Deere			
4420	11,070		
6601	11,476		
6620	12,417		
7720 and 7721	15,511		
8620	18,644		

* This figure represents the sum of the separating area and the cleaning area. Separating area includes the area of the straw walkers, concaves, and transition grate. Cleaning area is the area of the chaffer sieve, chaffer extension and cleaning sieve.

Combine Threshing Capacities

Combine S.L.s	Approximate Bushels Per Hour		Approximate Acres Per Hour	
	Field Efficiency (100%)	(80%)	Field Efficiency (100%)	(80%)
Self-Propelled				
8,000-10,000 sq. in.	180	125	6.5	4.5
10,000-12,000 sq. in.	220	150	8.0	5.5
12,000-14,000 sq. in.	285	195	10.0	7.0
14,000-17,000 sq. in.	340	235	13.0	9.0
18,000 + sq. in.	400	275	14.5	10.0
Pull Type				
10,000-12,000 sq. in.	210	145	7.5	5.25
12,000-14,000 sq. in.	260	180	9.5	6.5
14,000 + sq. in.	320	220	11.5	9.0

(a) Assumptions — Wheat Crop

Rotary Combines

S.P.

Small
(5.5 - 8.5 Ac/Hr)

Medium

(8.5 - 10.5 Ac/Hr)

Large

(11-14 Ac/Hr)

P.T.O.

Large

Model

IHC - 1420, IHC - 1440, NH - TR - 75

IHC - 1460, NH - TR - 85, AC - N6, AC - N5

IHC - 1480, W - 9700, AC - N7, NH - TR - 95

IHC - 1482, VERS - 2000

Appendix B

Rental Rate Calculation Worksheet Machinery Rental Rates

Machinery _____ Original Cash Cost _____

Basic Rental Cost (Per Hour)

Fixed Costs: _____ Rate/hr _____ x _____ No. of \$1000 orig. cash cost _____ = (A) _____

Repairs: _____ Rate/hr _____ x _____ No. of \$1000 orig. cash cost _____ = (B) _____

Basic Rental Cost = (C) \$ _____ /hr
(A + B)

Rental Margin = _____ Suggested Rate 15% _____ x _____ Basic Rental Cost — C _____ = (D) \$ _____ /hr.

Rental Rate

Rental Rate Per Hour = \$ _____ /hr
(C + D)

Other Charges _____

Adjusted Rental _____

Rate Per Hour _____

* Refer to "Machinery Cost Calculation Guides" (Col. D for fixed costs, Col. E for repair costs).

Appendix C

Custom Rate Calculation Worksheet Machinery Custom Rates

Operation _____

Power Unit _____ Original Cash Cost _____

Machine _____ Original Cash Cost _____

Tillage Implements, PTO Machine, Other

Power Unit Costs (Per Hour)

Fixed Costs	=	Rate/Hr.*	x	No. of \$1000 orig. cash cost	=	_____	(1)
Variable Costs							
Fuel	=	Gal./Hr.	x	Price/Gal.	=	_____	(2)
Oil & Grease	=	35¢/100 Hp	x		=	_____	(3)
Repairs	=	Rate/Hr.*	x	No. of \$1000 orig. cash cost	=	_____	(4)
Total Cost (Power Unit)						(A)	
(1 + 2 + 3 + 4)							

Machinery Costs (Per Hour)

Fixed Costs	=	Rate/Hr.*	x	No. of \$1000 orig. cash cost	=	_____	
Variable Costs (repairs, grease)	=	Rate/Hr.*	x	No. of \$1000 orig. cash cost	=	_____	
Total Costs (Machinery)						(B)	
(5 + 6)							

* Refer to "Machinery Cost Calculation Guides" (Col. D for fixed costs, Col. E for repair costs).

Appendix C (Continued)

Labor Cost (Per Hour) _____ (1) 	
Total Costs (Power Unit, Materials, Labor) $(A + B + C)$	
Charge (Per Hour) = _____ (2) 	
$\frac{\text{Suggested Rate 1976}}{(A + B + C)}$	
Total Charge Per Hour $(A + B + C + D)$ Rate Per Hour* _____ Charge Per Acre _____ Other Charges _____ Adjusted Charge _____	

* Note formulas (Appendix C). Where appropriate, substitute acres with other unit (e.g., bales, tons).

Appendix D

Machinery Cost Calculation Guides

Machine	A	B	C	D	E
	Annual Use (Hours)	Depreciation Lifetime (Years)	Average Annual Repair Rate (% of Orig. Cash Cost)	Fixed Cost Per Hour Per \$1000 Orig. Cash Cost	Repair Cost Per Hour Per \$1000 Orig. Cash Cost
Tractor (2 WD)	400	14.5	5.0	0.3914	0.3914
	600	13		0.3959	0.3959
	800	11.5		0.3999	0.3999
Tractors (4 WD)	300	15	4.0	0.4360	0.4360
	400	14		0.3970	0.3967
	500	13		0.2795	0.3967
Cultivators	150	17.5	H. Clay Sand 3.0-5.0	0.8159	H. Clay Sand 0.1300-0.2500
	250	15		0.8660	0.1300-0.2500
	350	13		0.8982	0.1300-0.2500
Discs & Tandem Disc	100	17	4.5	1.2160	0.3000
	150	15		0.6700	0.3000
	200	13.5		0.6666	0.3000
Rodweeds	60	17.5	5.5	2.0021	0.3000
	100	15		1.3000	0.3000
	140	13		0.8861	0.3000
Seed Drills, Air Seeder	60	17.5	4.5	2.0021	0.4000
	100	15		1.3000	0.4000
	140	13		0.8861	0.4000
Harrows & Packers	40	11	3.0	3.0000	0.9117
	60	10		2.6700	0.9117
	80	9		2.1313	0.9117
Sprayers	30	17.5	4.5	4.0942	0.3000
	50	15		2.9100	0.3000
	70	13		1.9982	0.3000
Stone Pickers, Bulk Applicator, Rock Rakes & Manure Spreaders	60	11	2.5	2.3386	0.7000
	80	10		2.0000	0.7000
	100	9		1.7000	0.7000
Front End Loaders, Post Pounder	80	11	1.7	1.9040	0.1800
	100	10		1.6000	0.1600
	120	9		1.4000	0.1600
Combines (PTO) (incl. rotary)	120	13	7.0	1.1644	0.4007
	150	12		0.9700	0.4007
	180	11		0.8482	0.4007
Combines (SP) (incl. rotary)	120	13	4.5	1.1644	0.3000
	150	12		0.9700	0.3000
	180	11		0.8482	0.3000
Swather (PTO) & Bale Wagons (PTO)	60	17.5	3.5	2.0021	0.3000
	100	15		1.3000	0.3000
	140	13		0.8861	0.3000

Appendix D (Continued)

Machinery Cost Calculation Guides

Machine	A	B	C	D	E
	Annual Use (Hours)	Depreciation Lifetime (Years)	Average Annual Repair Rate (% of Orig. Cash Cost)	Fixed Cost Per Hour Per \$1000 Orig. Cash Cost	Repair Cost Per Hour Per \$1000 Orig. Cash Cost
Swathers (SP) & Bale Wagons (SP)	80	17.5	2.0	2.88911	0.3000
	100	15		1.5889	0.3500
	140	13.5		0.8891	0.3800
Mowers, Rakes, Rotary Cutter & Conditioners	50	13	2.0	2.7666	0.4200
	70	12		2.0766	0.4800
	90	11		1.6666	0.4800
Forage Harvesters, Big Bale Mower, Stackers & Movers	40	14.5	2.5	3.3142	0.3125
	80	12		1.8142	0.3125
	120	10.5		1.3018	0.3125
Liquid Manure Spreaders	120	11	2.5	1.3883	0.3788
	140	10		1.1484	0.3788
	180	9		1.0666	0.3788
Balers (Standard) Bale Throwers	40	12	2.0	3.8376	0.2900
	80	10		2.8888	0.2500
	120	8.5		1.4888	0.2500
Balers (Large Round)	30	14.5	1.5	4.1188	0.2800
	60	12		2.4850	0.2800
	90	10.5		1.7357	0.2800
Trucks, Pick-ups (farm use only)	100	16	3.5	1.2675	0.2917
	120	15		1.0875	0.2917
	140	14		0.9528	0.2917
Trucks, Grain Trucks	100	16	4.5	1.2675	0.3750
	120	15		1.0875	0.3750
	140	14		0.8889	0.3750
Grain Augers & Pneumatic Grain Movers	25	18	2.0	4.8200	0.4000
	50	15		2.8100	0.4000
	75	13		1.8931	0.4000
Grinder Mixers & Tub Grinders	100	12	4.0	1.4640	0.2800
	200	10		0.8085	0.2800
	300	8.5		0.5879	0.2800
Snow Blowers	20	18	3.5	8.0880	0.8750
	40	15		3.2885	0.8750
	100	10		1.8050	0.8750
Plows	100	17.5	8.25	1.2180	0.5500
	150	15		0.8700	0.5500
	200	13		0.6987	0.5500

Notes

- A. Estimated average annual farm use.
- B. Estimated average number of years of useful life.
- C. Repair Rates are estimates based on average conditions. Adjustments are necessary for varying conditions.
- D. Fixed costs per hour: Depreciation, Investment Cost, Insurance and Housing.

(i) Depreciation/hr =

$$\frac{\text{Original Cash Cost} - \text{Salvage Value}}{\text{Years Lifetime} \times \text{Annual Hours Use}}$$

(ii) Investment Cost/hr =

$$\frac{\text{Original Cash Cost} + \text{Salvage Value}}{2 \times \text{Annual Hours Use}} \times 12.0\%$$

(iii) Insurance & Housing/hr =

$$\frac{\text{Original Cash Cost} \times 1\%}{\text{Annual Hours Use}}$$

E. Repair Costs calculated on an hourly basis per \$1,000 original cost

$$\frac{\text{Original Cost}}{1000} \times \text{Applicable cost factor from Column E}$$

* 12.0% assumes 50% borrowed — 50% owned

Acres Per Hour

A. Tillage Operations

(82.5% field efficiency)

$$\frac{\text{Machine Width (ft.)} \times \text{Speed (mph)}}{10}$$

B. Seeding and Harvesting

(69% field efficiency)

$$\frac{\text{Machine Width (ft.)} \times \text{Speed (mph)}}{12}$$

Appendix E

Factors to Consider When Custom Hiring

Custom hiring is a business arrangement. The terms of the arrangement should be written in a formal agreement. If unwritten, the terms are more likely to be misunderstood in case of a dispute.

The following should be considered in a custom hiring agreement.

Timeliness. Significant losses can occur if an operation is not started or completed on time. To facilitate planning, a custom hiring agreement should include a schedule of operations for both parties. For example, when the custom combiner is picking up swathed grain, the schedule would outline time periods for swathing by the client and combining by the custom operator. Such a schedule would be subject to weather conditions and crop maturity.

Operations. The parties should write into the agreement the exact operations to be performed by each party and the machine, materials and labour to be supplied by each.

Rate Schedule. The custom operator should for each operation to be performed stipulate his rate on the basis of acreage, time (hour, day, week) or total operation performed.

Management. A custom hiring agreement should ensure that the custom operator will employ acceptable management practices in his operations.

Down-Time. The parties to a custom hiring agreement should consider and write into their agreement a clause regarding possible alternatives should a major breakdown occur during a peak period.

Payment. A custom hiring agreement should stipulate terms of payment for custom operations. As well the custom operator should bill the client upon the completion of each custom operation. The bill should indicate actual units (hours, acres, etc.) completed, the rate charged per unit, the total charge and the date payment is due.

Termination. A minimum period for notice of termination should be included in a custom hiring agreement. A penalty should be stipulated for unjustified termination within the term of the agreement.

POOR

QUALITY

ORIGINAL